Appl. No. 10/506,525 Amdt. dated May 23, 2006

Reply to Office action of February 23, 2006

## In the Claims:

Claim 1 is amended herein. Claim 2 is canceled.

1. (currently amended) The method of operating the well jet device during ultrasonic cleaning of the downhole area of a formation, consisting in that comprising installing bottom up an assembly of an input cone with a shank, a packer and a jet pump, in the case of which having a case with a passage for supplying an active medium, a passage for supplying the medium pumped out of the well, and a stepped through passage with a mounting seat between the steps are made, are all installed bottom up of the stepped through passage,

this <u>lowering said</u> assembly is <u>lowered</u> on the  $\underline{a}$  tubing string into the well, the said input cone being arranged not lower than the a roof of the a producing formation;

released, and, then, lowering a receiver-transformer of physical fields is lowered in the well through the through passage, as made in the case of the jet pump, on a logging cable or a wire together with a sealing assembly, which is arranged on the logging cable or the wire above the tip for connecting the receiver-transformer of physical fields and is installed onto the mounting seat in the through passage made in the case of the jet pump, while ensuring the possibility of reciprocal motion of the

logging cable or the wire in the sealing assembly; Page 9 — RESPONSE (U.S. Patent Appln. s.n. 10/506,525)

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during the process of lowering <u>conducting</u> background measurements of temperature and other physical fields <del>are conducted</del> along the borehole from the input cone to the well bottom;

then <u>arranging</u> the receiver-transformer of physical fields is <u>arranged</u> above the roof of the producing formation;

draining the formation is drained by supplying a liquid medium under pressure to the active nozzle of the jet pump, while several values of pressure drawdown on the formation are successively created and at each value well bottom pressures, registering the composition and the physical parameters of the fluid coming out of the producing formation as well as the well output are registered;

then, while operating the jet pump at a set value of pressure drawdown on the formation, moving the receiver-transformer of physical fields is moved along the well axis from the well bottom to the input cone, during this operation registering the inflow profile and the parameters of the formation fluid, the well bottom pressure as well as the changes in the physical fields in the downhole area of the formation areall registered with using the measurements for assessing the work of individual layers of the producing formation and the composition of the fluid coming out of them;

then <u>stopping</u> the supply of the liquid medium to the jet pump <u>is stopped</u>, removing the receiver-transformer of physical

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fields is removed from the well together with the logging cable or the wire and the sealing assembly,

then <u>lowering</u> an instrument for ultrasonic action on the formation is <u>lowered</u> into the well on the logging cable or the wire via the tubing string, the said instrument comprising an irradiator of ultrasound, together with the sealing assembly movably arranged above it on the logging cable;

<u>installing</u> the latter <u>is installed</u> onto the mounting seat in the through passage, and <u>installing</u> the irradiator of ultrasound <u>is installed</u> opposite to the producing formation;

after this <u>acting on</u> the producing formation is acted on by ultrasonic oscillations, first acting on its non-working layers and then on working layers while going successively from less permeable to more permeable layers and acting on each of them with not less than two ultrasonic frequencies;

during the ultrasonic treatment of layers of the producing formation <u>acting on</u> the latter <del>is acted on</del> hydrodynamically by supplying a liquid medium to the active nozzle of the jet pump according to the following scheme:

creation of creating stepwise drawdown on the formation, keeping of the said drawdown, stepwise restoration restoring of the hydrostatic pressure of the liquid medium at the well bottom and keeping of this pressure, wherein the time of keeping the drawdown on the formation is set to be greater than the time of acting on the formation by the hydrostatic pressure of the liquid

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medium, and the number of cycles of the hydrodynamic action on each layer of the formation in combination with ultrasonic oscillations should not be less than 5; and

after finishing acting on each layer of the formation with ultrasonic oscillations in combination with the hydrodynamic action <u>carrying out</u> a control measurement of the well output is—

<u>carried out</u> while <u>operating</u> the jet pump is <u>operated</u>, and after finishing acting on the whole formation with ultrasonic oscillations in combination with the hydrodynamic action <u>removing</u> the instrument for ultrasonic action on the formation is <u>removed</u> out of the well to the surface, hydrodynamic and geophysical studies of the well are conducted with the use of the jet pump and replaceable functional inserts;

then <u>taking</u> the assembly with the jet pump <u>is taken</u> to the surface, and <u>carrying out</u> the measures necessary for putting the well into exploitation <del>are carried out</del>.

## 2. (canceled)